

Figure 1

SP 0	SP 4	C 8	C 12	C 16	C 20	C 24	C 28
R 1	SP 5	C 9	C 13	C 17	C 21	C 25	C 29
R 2	SP 6	SP 10	SP 14	SP 18	C 22	C 26	C 30
SP 3	SP 7	R 11	R 15	SP 19	C 23	C 27	C 31
C 32	SP 36	SP 40	SP 44	SP 48	C 52	C 56	C 60
C 33	C 37	C 41	C 45	C 49	C 53	C 57	C 61
C 34	C 38	C 42	C 46	C 50	C 54	C 58	C 62
C 35	C 39	C 43	C 47	C 51	C 55	C 59	C 63

Figure 2A

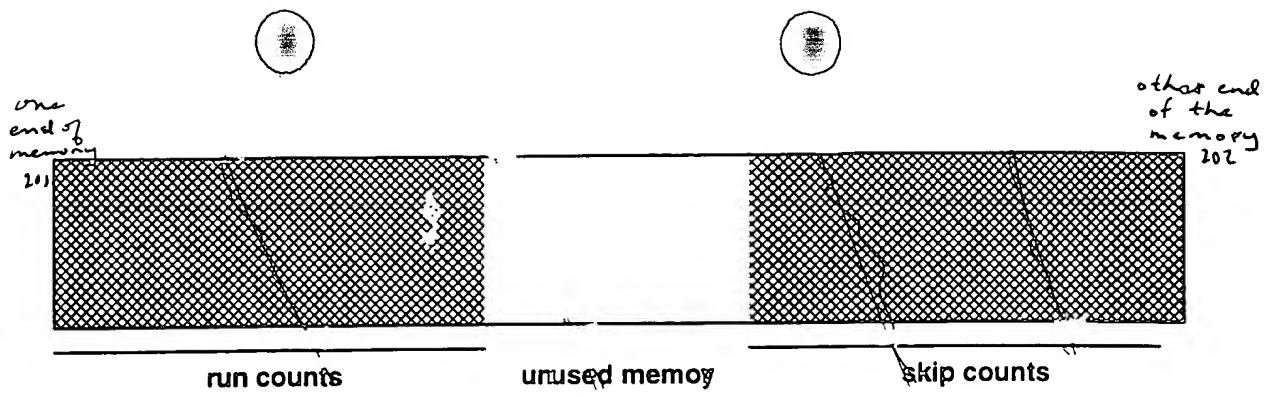


Figure 2B

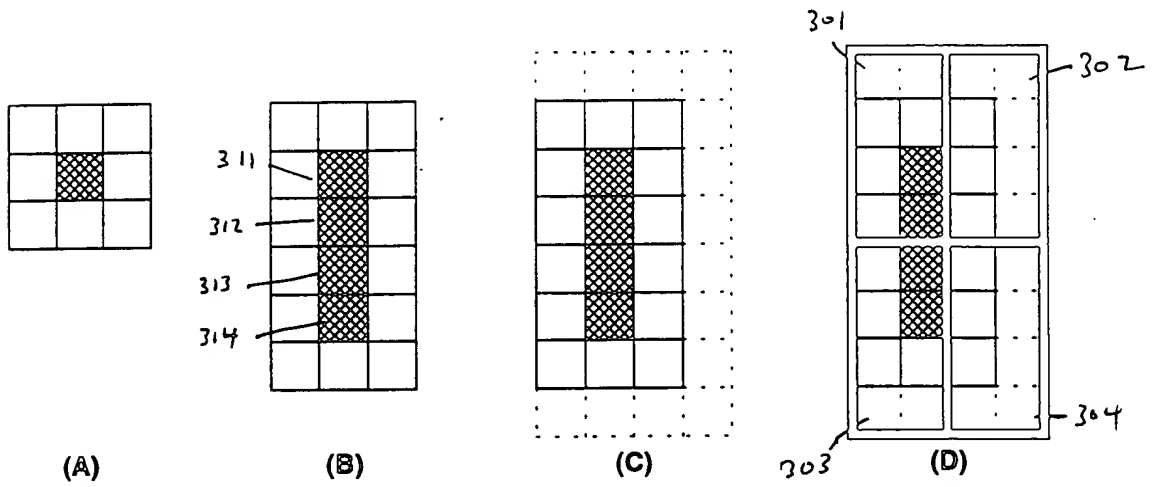
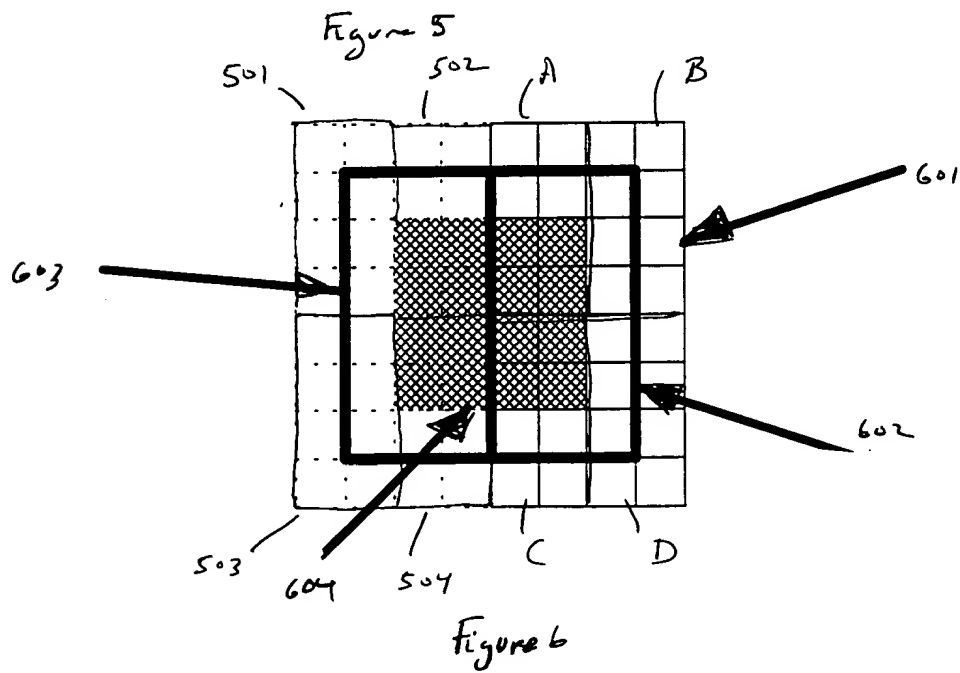
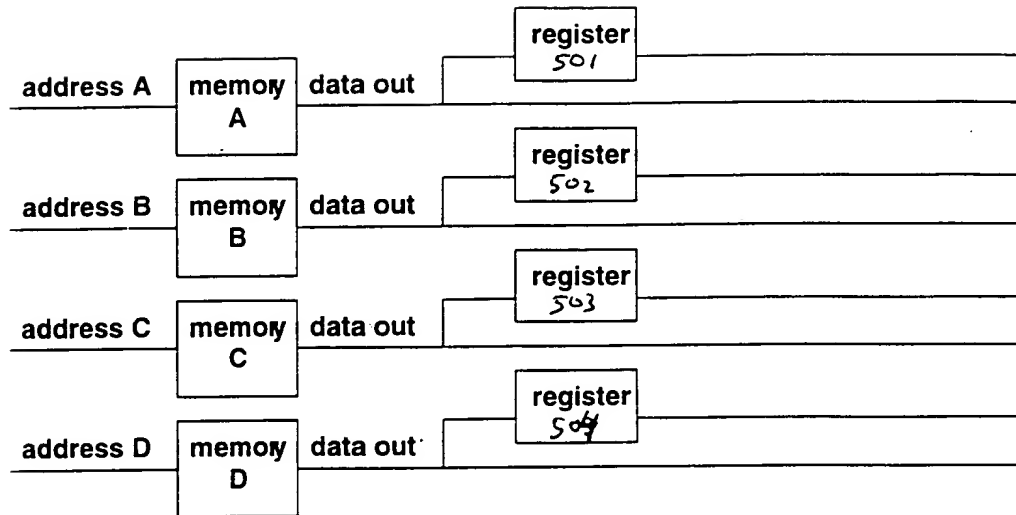


Figure 3

	0	1	2	3	4	5	6	7
0	A	B	A	B	A	B	A	B
1	C	D	C	D	C	D	C	D
2	A	B	A	B	A	B	A	B
3	C	D	C	D	C	D	C	D
0	A	B	A	B	A	B	A	B

Figure 4



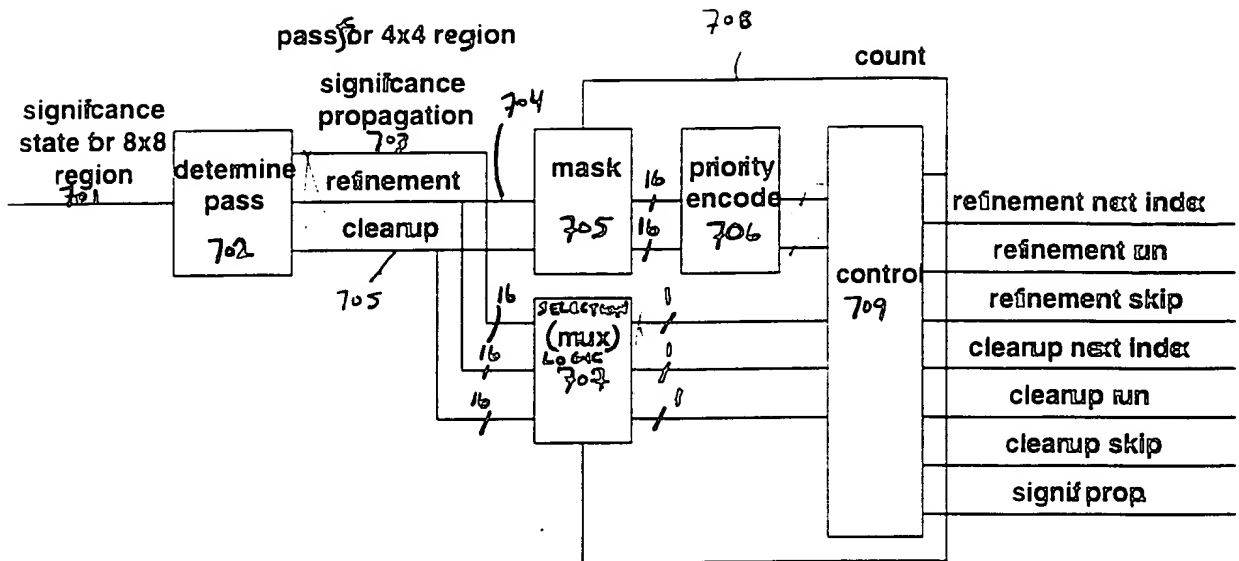


Figure 7

SP	SP	SP	SP
C	C	C	C
SP	SP	SP	SP
SP	R	R	SP

SP = significance propagation
C = cleanup
R = refinement

SP pass: 10*2 for SP pass coefficients
6 for C and R pass coefficients
C pass: 4*2 for C pass coefficients
R pass: 2 for R pass
total: 36 clocks = 2.25 clocks per coefficient

Figure 8

	0	1	2	3
0	A	A	A	A
1	B	B	B	B
2	A	A	A	A
3	B	B	B	B
0	A	A	A	A

Figure 9

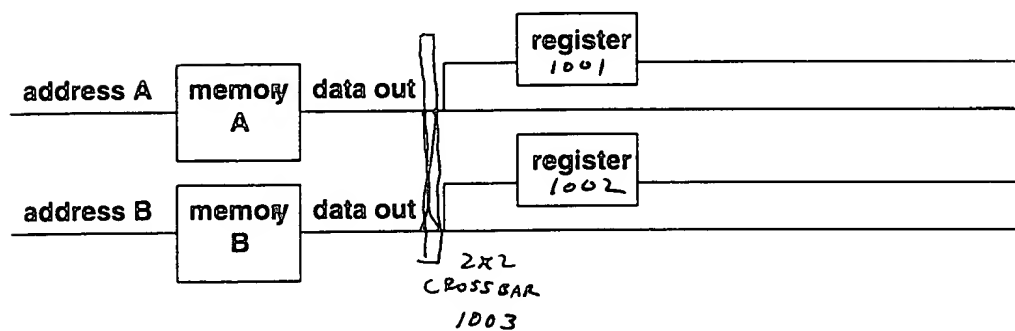


Figure 10

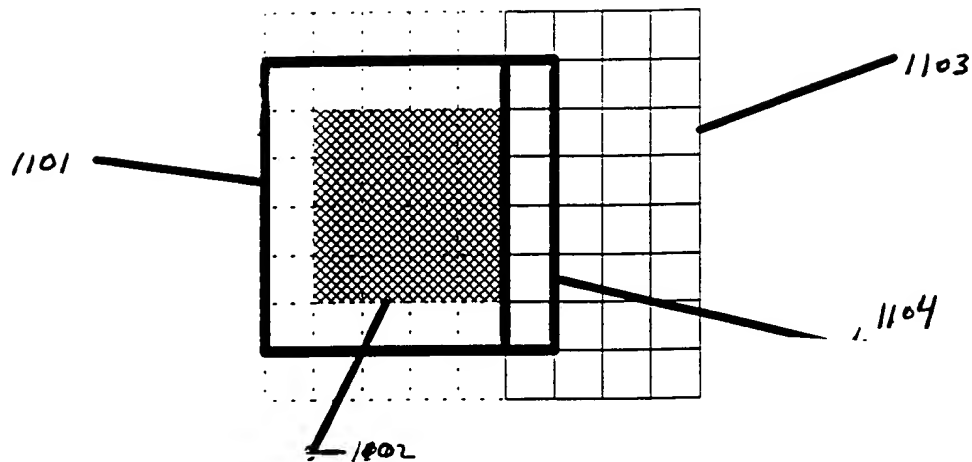


Figure 11

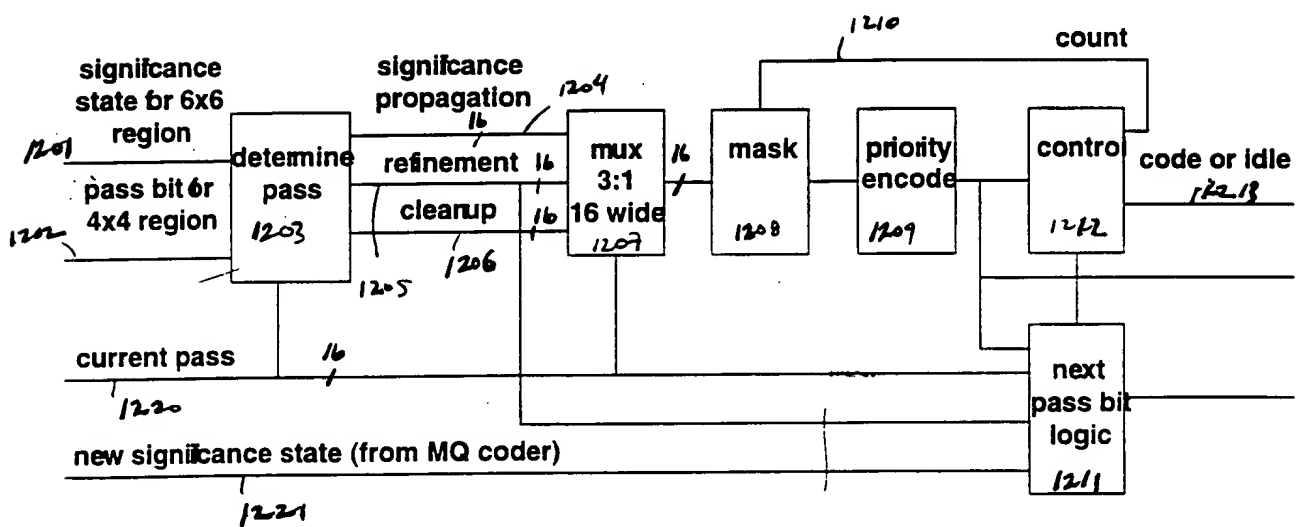


Figure 12

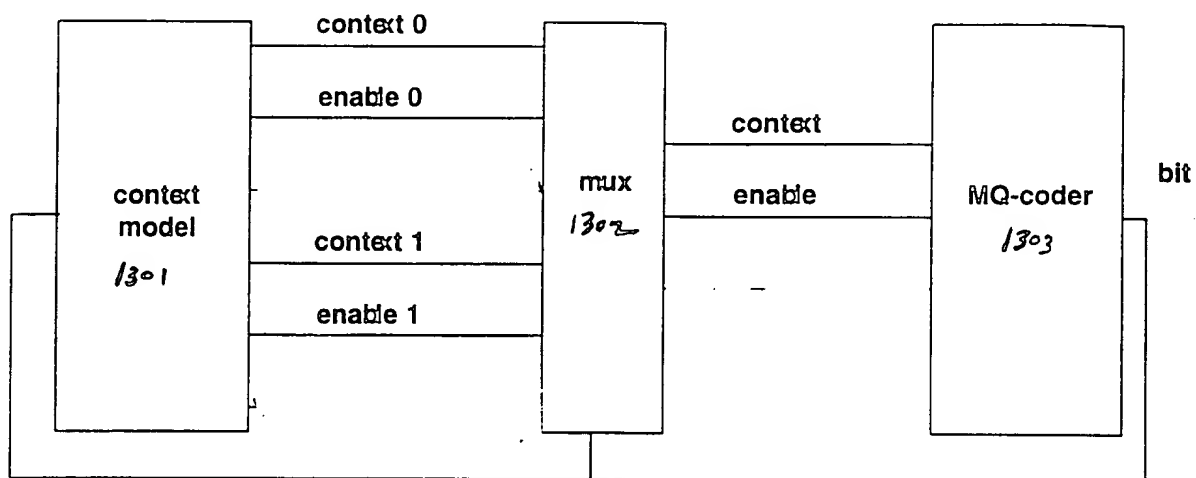


Figure 13

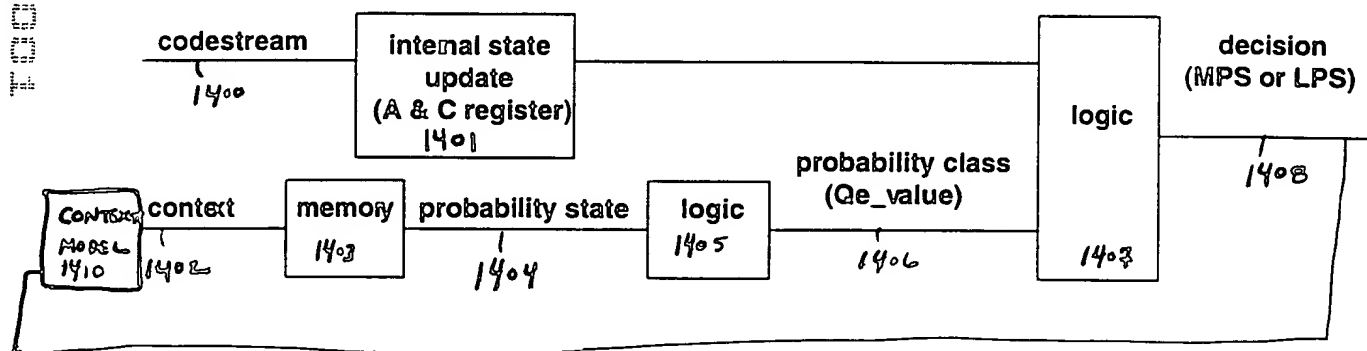


Figure 14A

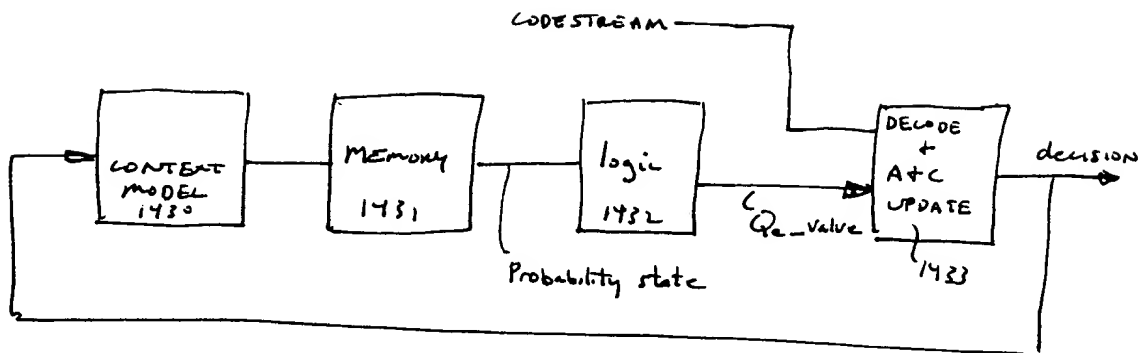


Figure 14B.

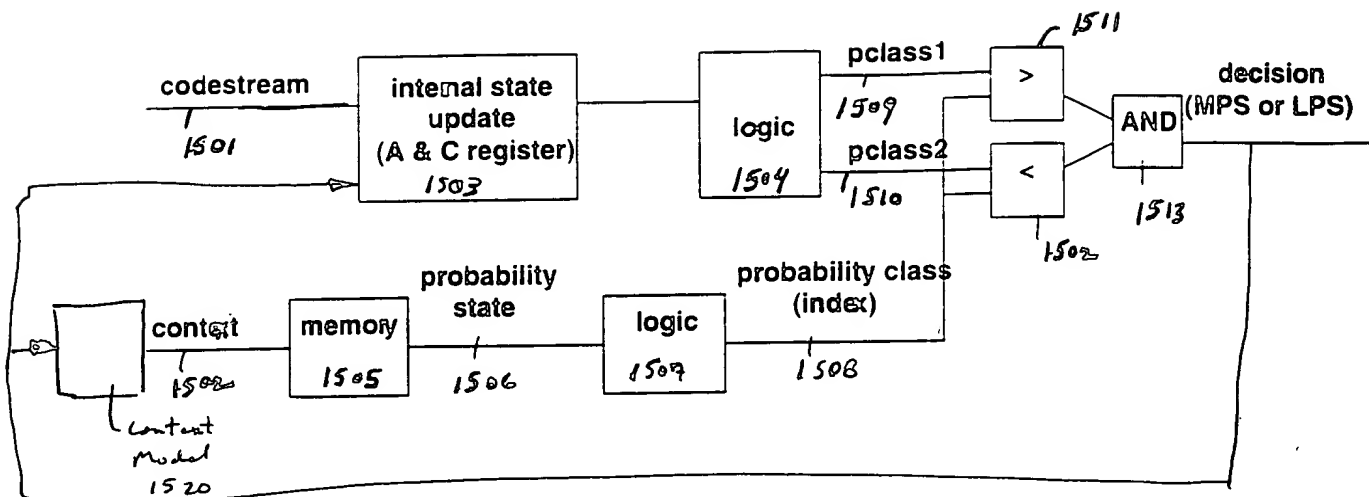


Figure 15

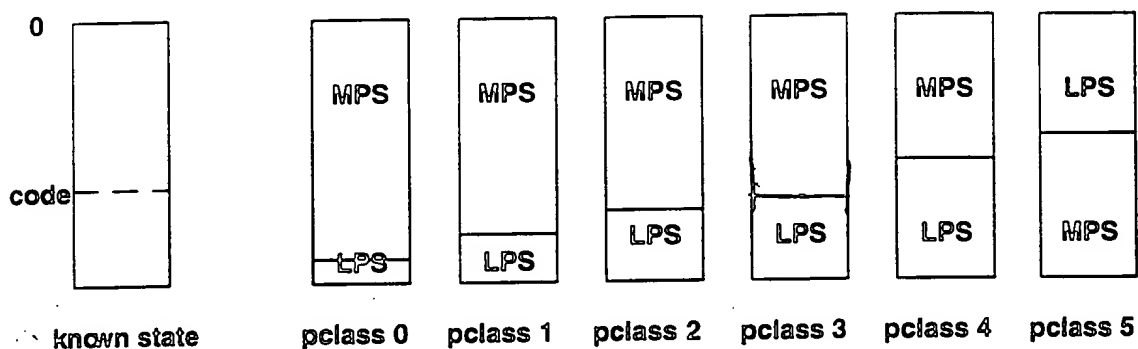


Figure 16A

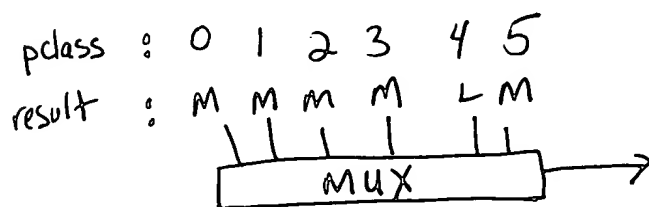


Figure 16B

luminance				chrominance				chrominance			
A	A	A	B	C	C	C		D	D	D	
A	A			C	C			D	D		
A		A		C		C		D		D	
B			A	C				D			

(A)

F	F	F	C	B	B	C		D	D	F	
A	A			C	C			E	E		
F		F		A		B		D		E	
A			B	D				E			

(B)

A	A	A	C	E	E	E		G	G	G	
A	A			E	E			G	G		
A		A		E		E		G		G	
B			D	F				H			

(C)

Figure 19

luminance

chrominance

chrominance

A	A	D	C
A	A		
D		A	
A		B	

B	B	D	
B	B		
D		B	

C	C	D	
C	C		
D		C	

(A)

A	A	A	C
A	A		
A		A	
B		D	

E	E	E		
E	E			
E	E	B		

F	F	F	
F	F		
F	F		
F		F	

(B)

A	A	H	E
A	A		
B		A	
C			D

F	F	H	
F	F		
B	F		

G	G	H	
G	G		
B	G		

(C)

Figure 20

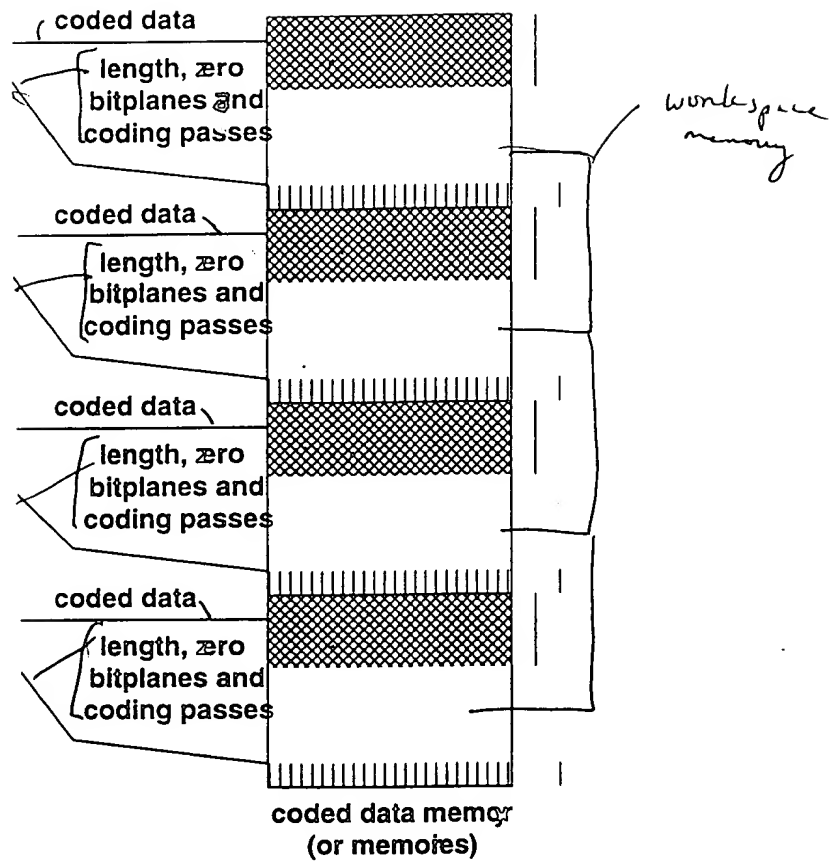


Figure 21

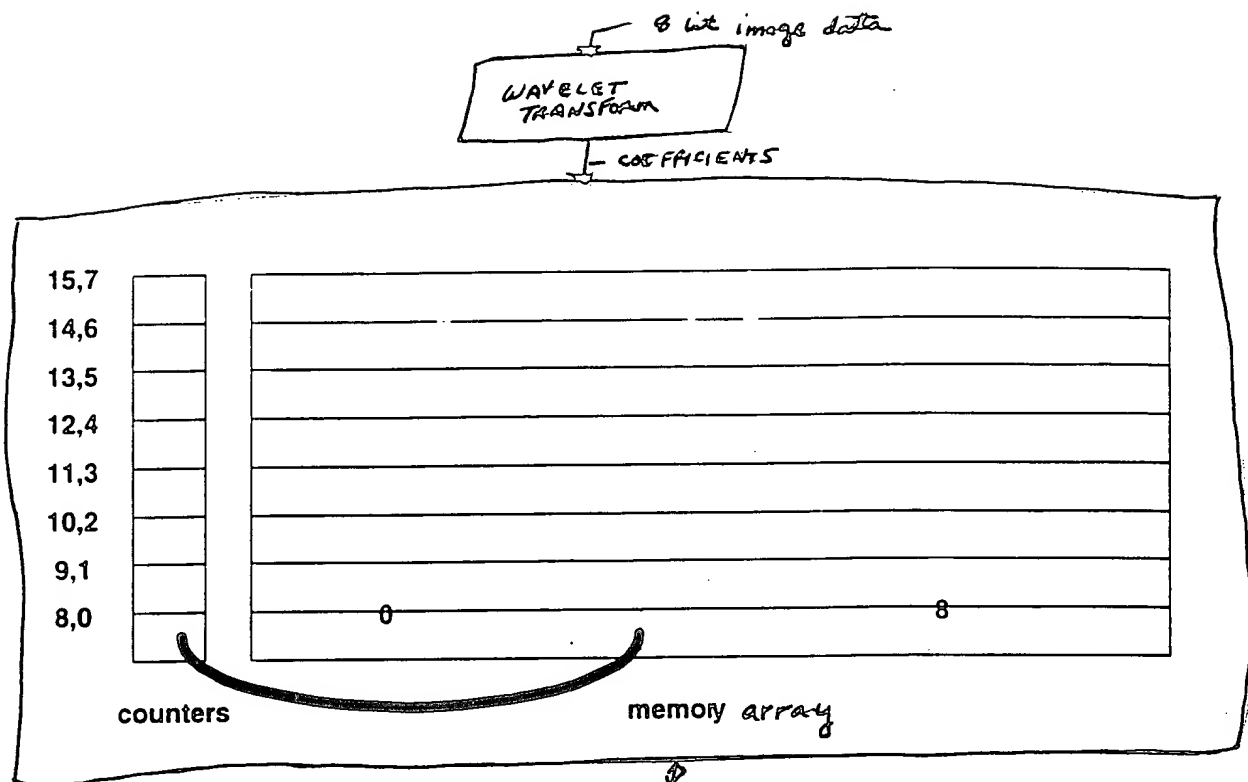


Figure 22-A

CONTEXT MODEL

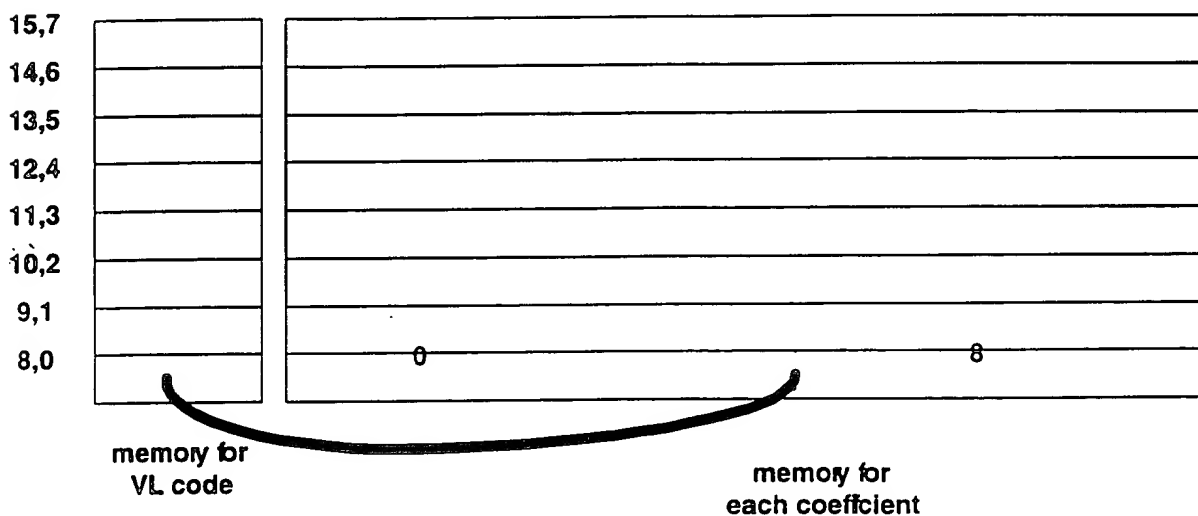


Figure 23

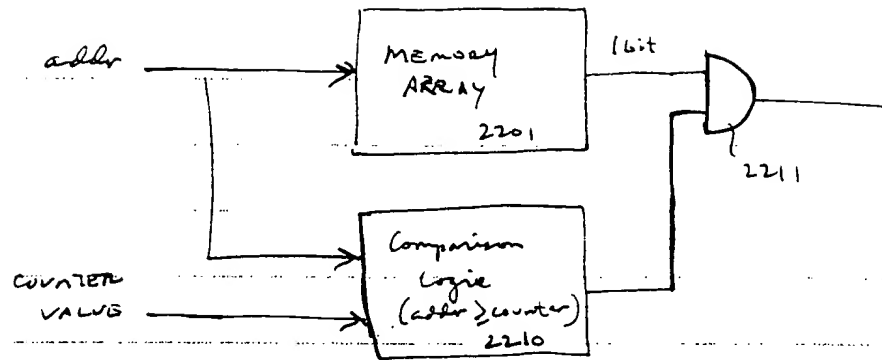
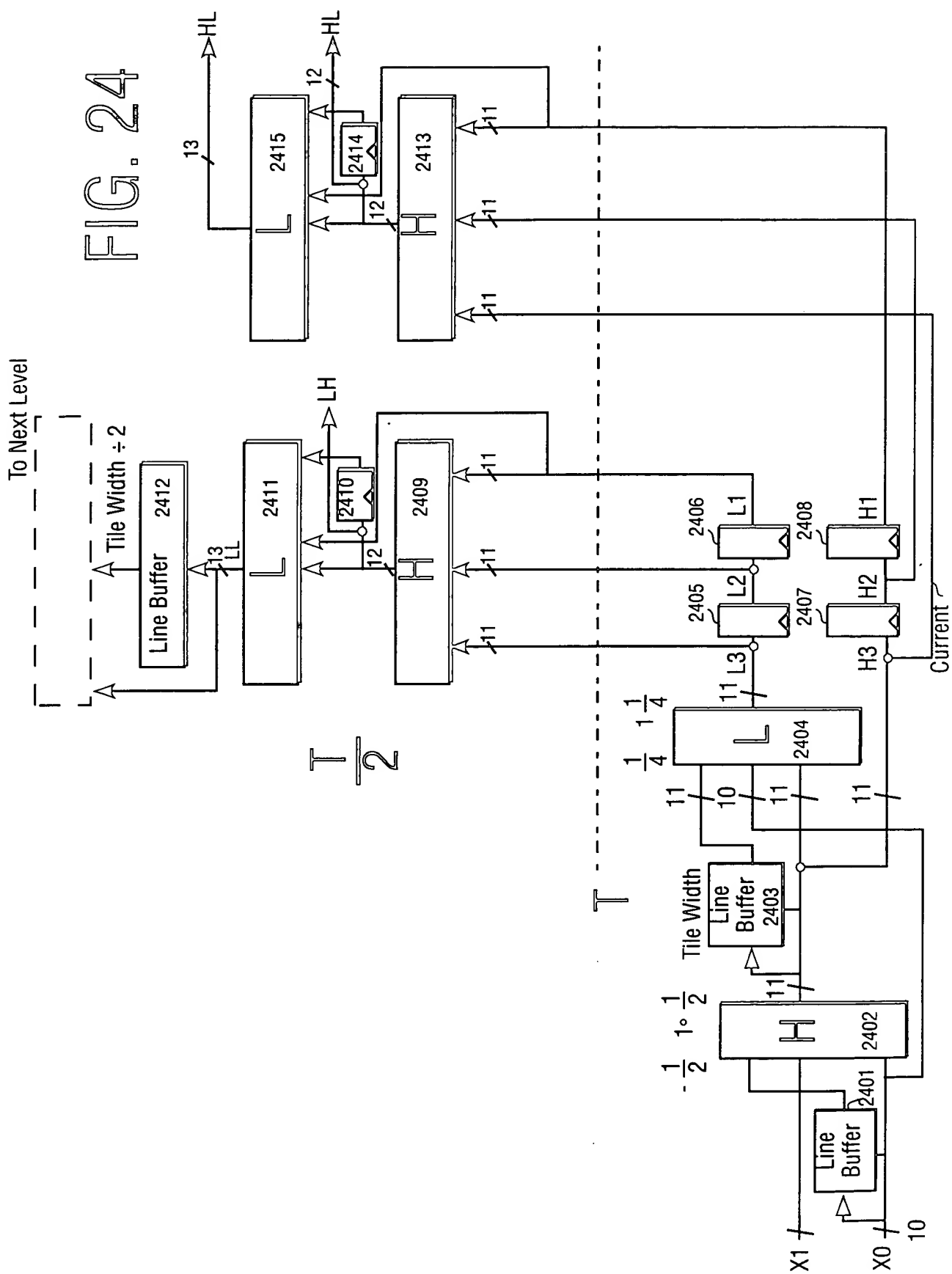


Figure 22B

To Next Level



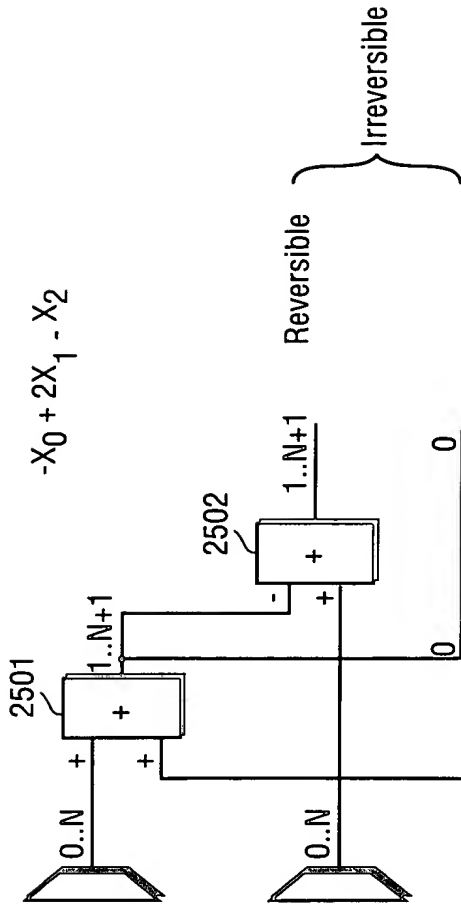


FIG. 25A

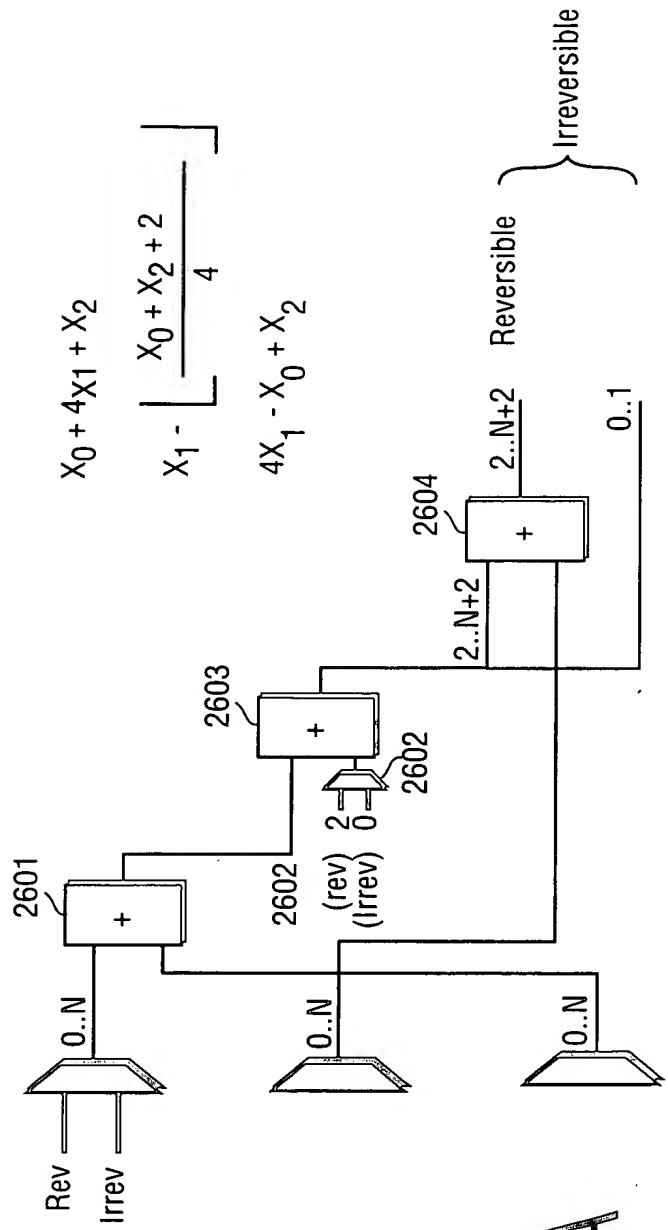


FIG. 26A

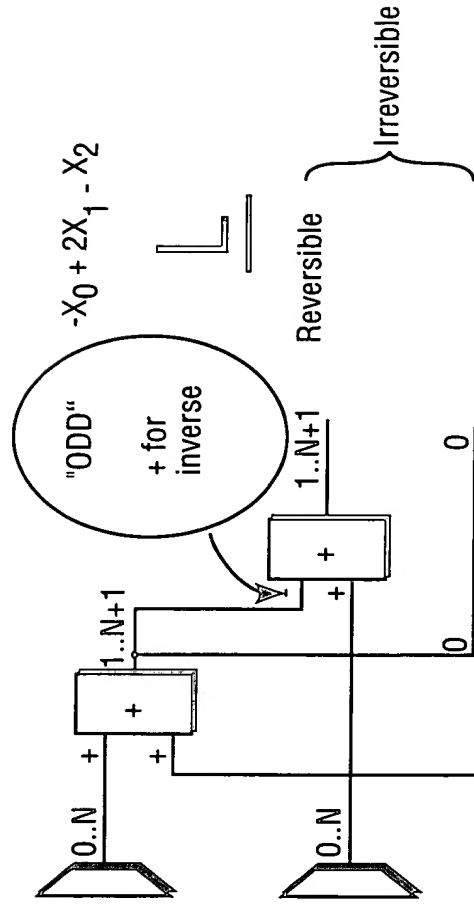


FIG. 25B

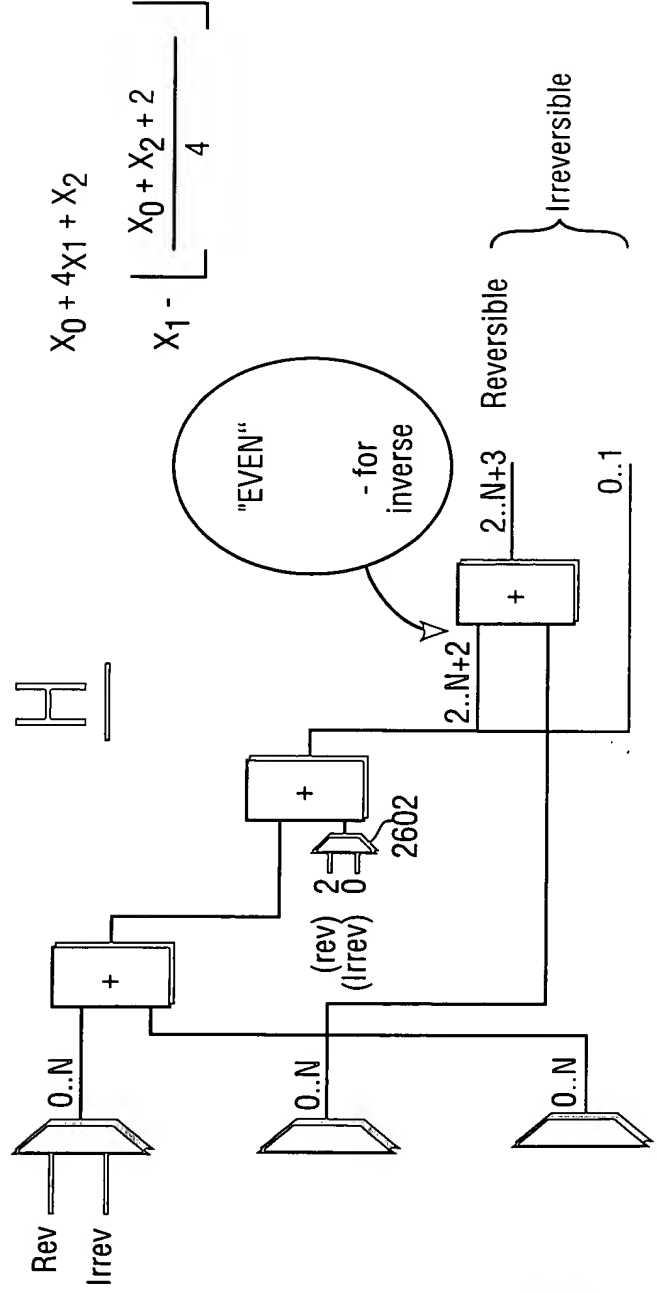
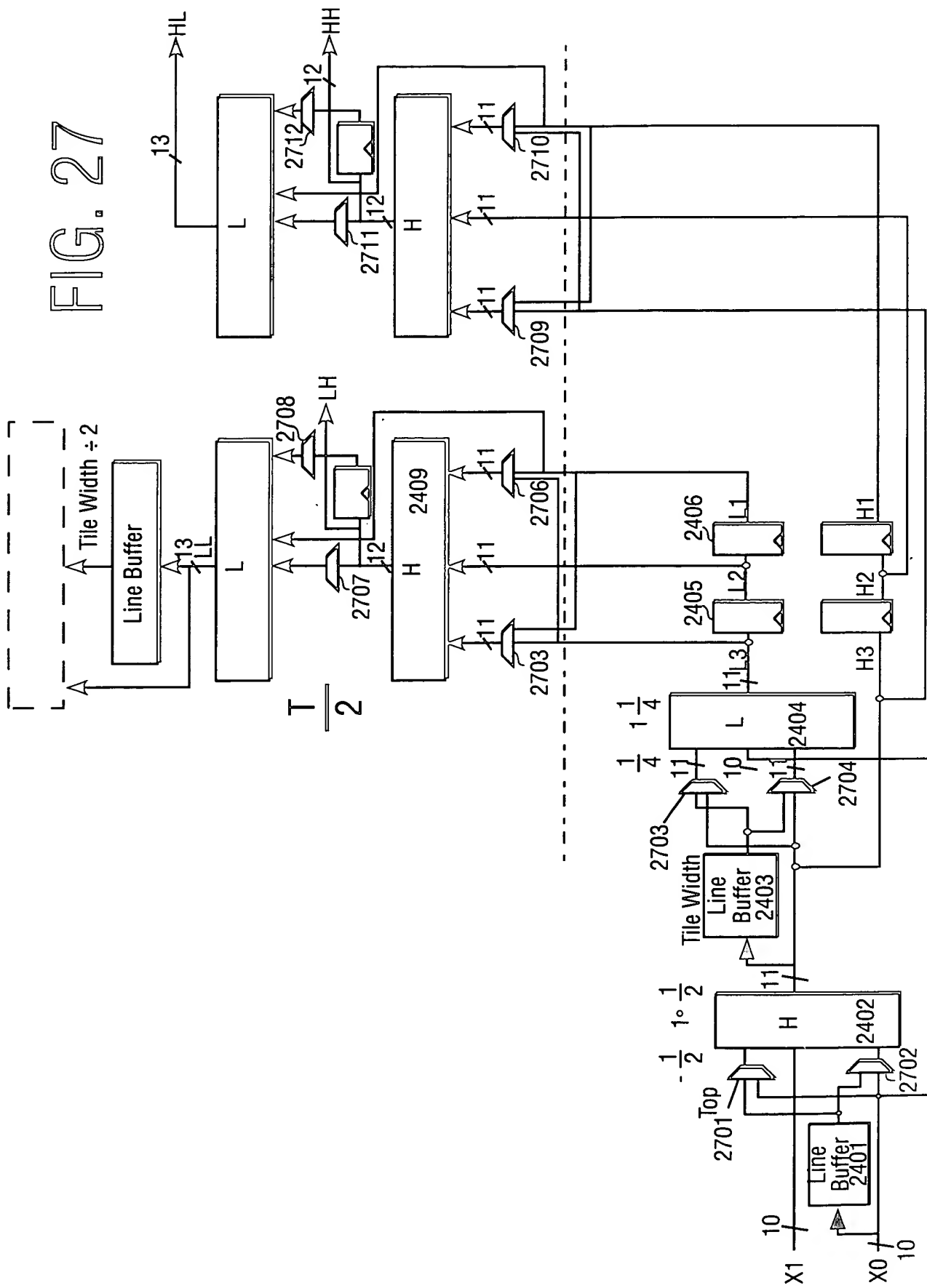


FIG. 26B



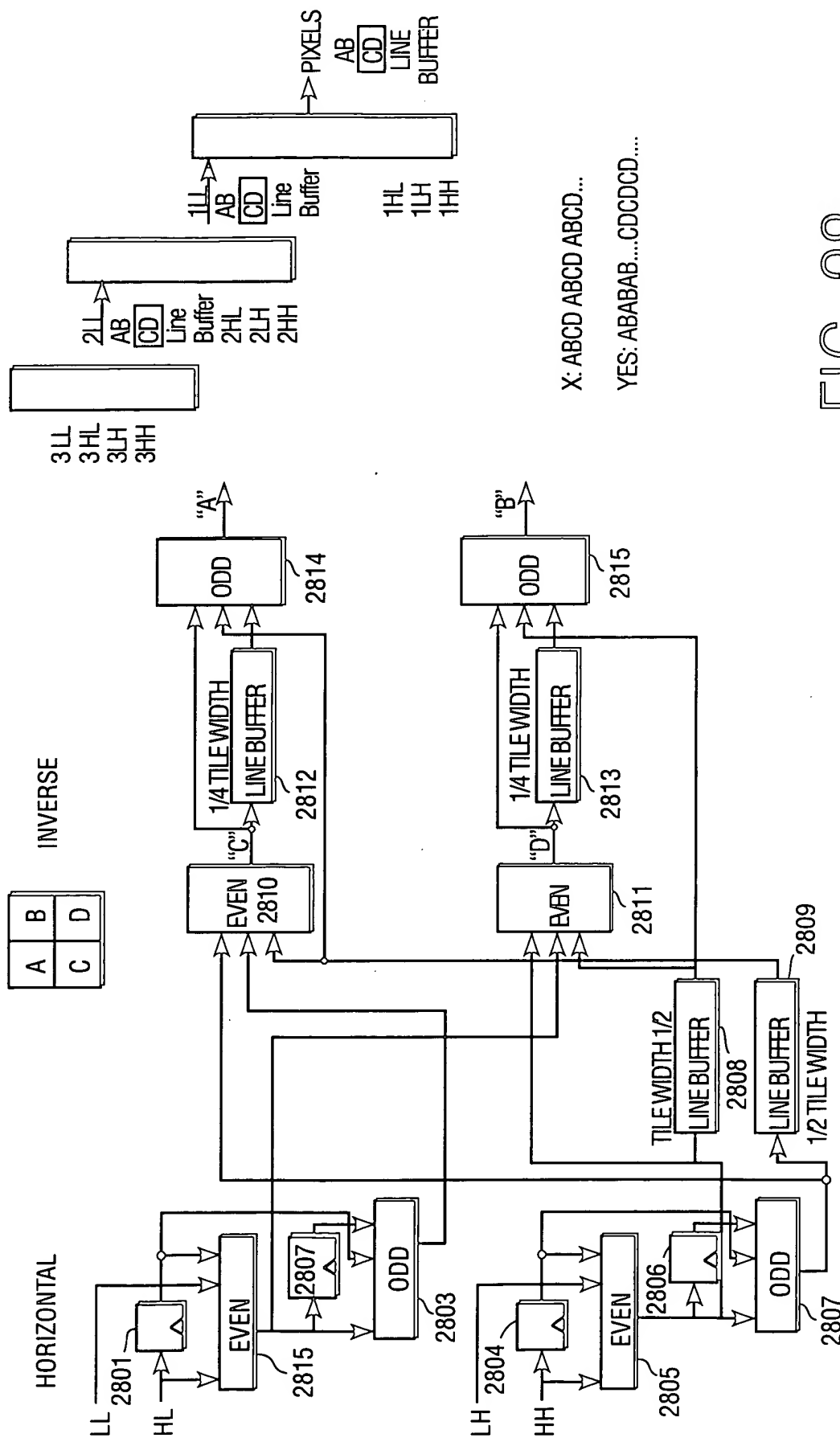


FIG. 28

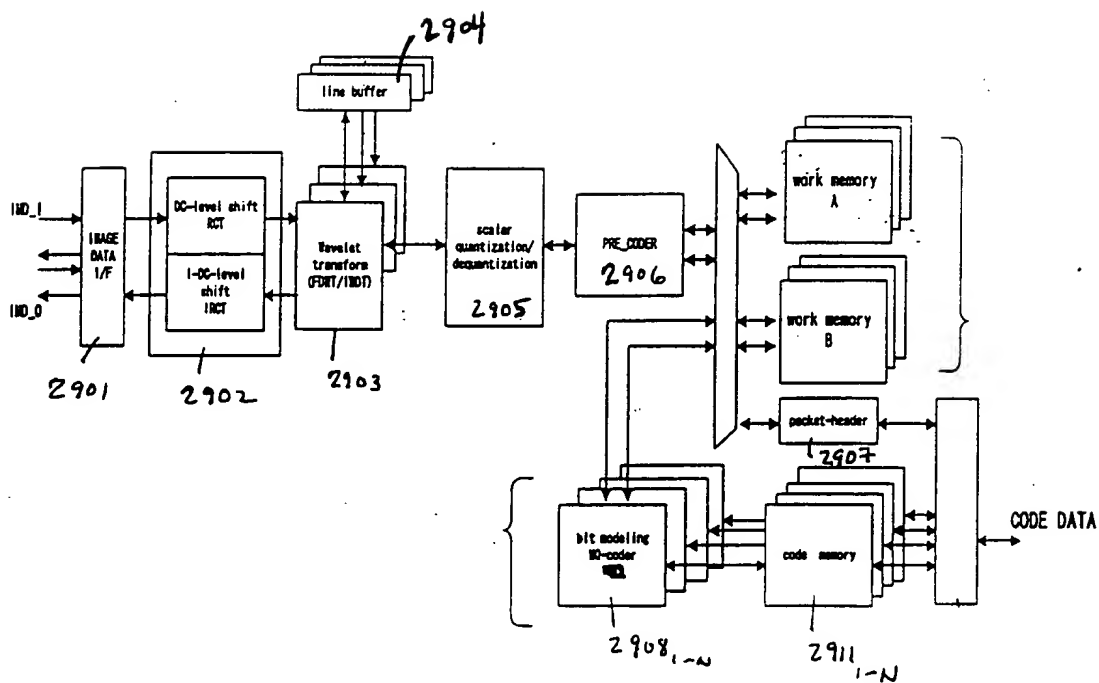


Figure 29

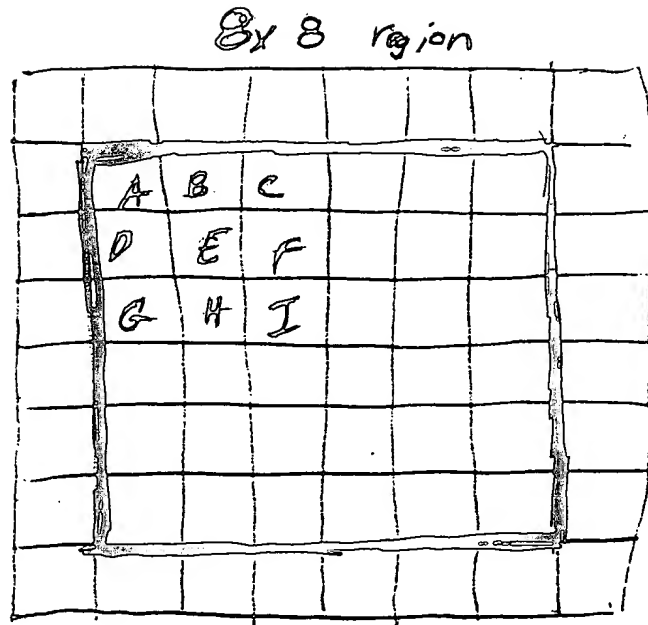


Figure 31

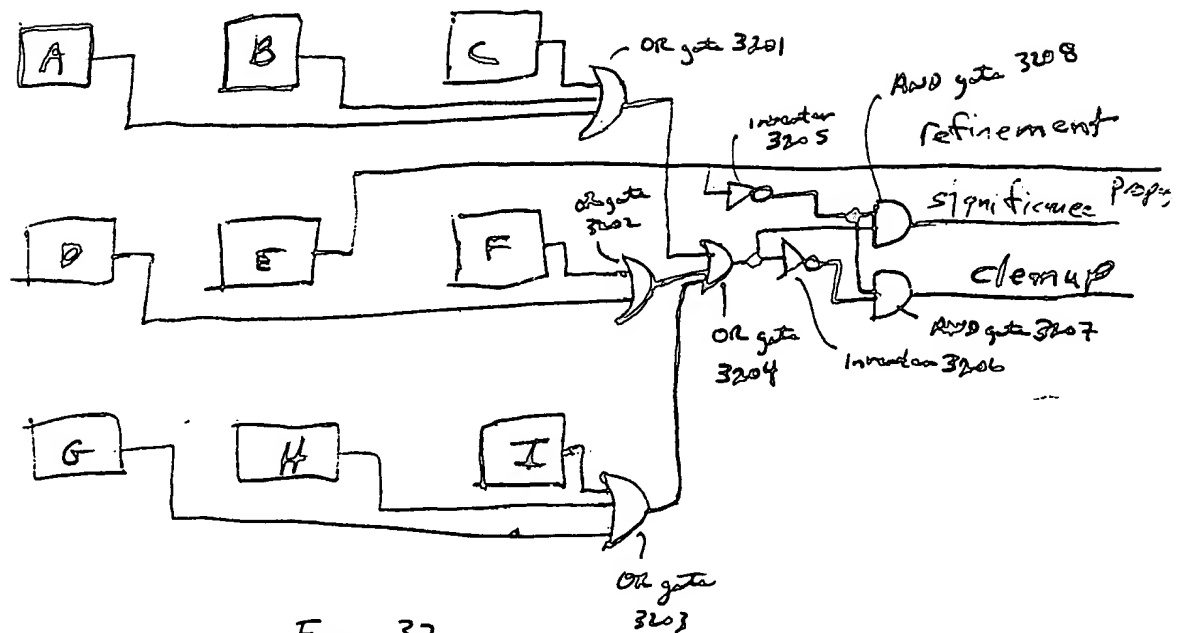


Figure 32